

**Listing and Amendments to the Claims**

This listing of claims will replace the claims that were published in the PCT Application and the annexes of the International Preliminary Examination Report :

1. (currently amended) A coaxial structure microwave filter comprising a tube (1,1',1'') presenting a constant inner diameter and a fully metallized outer surface with, in the axial direction, a profile according to a periodic or constant function and an inner bar (2,2',2'') with a ~~constant~~ fully metallized outer profile or following a constant or periodic function, ~~fully metallized characterized in that the tube and the bar are being realized in foam of a metallizable material, the largest diameter of the bar (3A-3D; 3A', 3B')~~ being ~~noticeable~~ noticeably equal to the inner diameter of the tube.

2. (currently amended) The filter according to claim 1, ~~characterized in that wherein~~ the periodic function is a crenelation function, the crenelations having dimensions identical ~~to or different~~ from one crenelation to another.

3. (currently amended) ~~Process for manufacturing a filter according to a one of claims 1 to 3,~~ coaxial structure microwave comprising a tube presenting a constant inner diameter and a fully metallized outer surface with, in the axial direction, a profile according to a periodic or constant function and an inner bar with a fully metallized outer profile following a constant or periodic function, the tube and the bar being realized in foam of a metallizable material, the largest diameter of the bar being noticeably equal to the inner diameter of the tube in which the periodic function is realized by thermoforming the foam tube or foam bar.

4. (currently amended) ~~Process~~ The process of manufacturing according to claim 4, in which the foam tube or foam bar is metallized at the surface by projection or by brush.

5. (new) The filter according to claim 1, wherein the periodic function is a crenelation function, the crenelations having dimensions different from one crenelation to another.